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Long

Mathematics for Liberal Arts

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### Mathemalchemy Project

For my project, I decided to make pi into music since I am a Music Performance major, and I like pi. Professor Long told me I should make a song for Mathemalchemy, so I went ahead and made this abomination. The tempo of the piece is 78.5 which is 314 divided by 4 because I thought it would be funny to have a decimal there. For every note in the piece, their scale degrees in C Major matched up with the digits in pi. With 0 being a rest, 1 being C, 2 being D, 3 being E, and so on up to the 69<sup>th</sup> digit, which was not on purpose it just had a nice ending there. The number of digits also fits pretty well into 2 measures of a 3/4 time signature. Then the parts below start after 8 beats consecutively, having up to 4 parts in 4 different octaves playing at once, sort of in the style of a round. It sounds kind of random, it sounds kind of musical, it sounds rational and irrational, and it sounds kind of chaotic in the middle. But math is random, musical, rational, irrational, and chaotic, so it was a perfect fit. I thought about making it way longer with the "1 million digits of pi" website, but it would have taken me infinity since there are no patterns to copy and paste. Then it would have taken me the power set of that infinity to make the other 3 parts as well. But I will make it longer if he wants me to. So here it is.